WHAT IS CLAIMED IS:

1. A method for manipulating a first plate in a MEMS device relative to a second plate in a MEMS device, the method comprising:

providing a first actuator and a second actuator disposed above a base layer;

providing the first plate supported by a first pivot, wherein the first plate is disposed above the first actuator and the first pivot is disposed above the base layer between the first actuator and the second actuator;

providing a second plate supported by a second pivot, wherein the second plate is disposed above the second actuator and the second pivot is dispose above the base layer;

activating the second actuator to cause the second plate to impact the first plate.

2. The method of claim 1, wherein the impact is a first impact, the method further comprising:

deactivating the second actuator, wherein the second plate moves away from the first plate; and

reactivating the second actuator to cause the second plate to impact the first plate for a second time.

3. The method of claim 1, the method further comprising:

activating the first actuator to create an actuator force on the first plate, wherein the actuator force on the first plate encourages the first plate to deflect toward the second plate.

4. The method of claim 1, wherein the first plate comprises a mirror, and wherein the second plate comprises a mirror.

5. An apparatus adapted for encouraging a structural plate in a MEMS device to deflect toward a static position, the apparatus comprising:

a base layer;

a first pivot and a second pivot disposed on the base layer;

a first structural plate supported by the first pivot and disposed above the base layer, wherein the first structural plate is deflected away from the static position;

a second structural plate supported by the second pivot and disposed above the base layer; and

wherein the second structural plate is movable to generate a physical force, and wherein the physical force encourages the first structural plate to move toward the static position.

6. The apparatus of claim 5, the apparatus further comprising:

a first actuator for deflecting the first structural plate;

a second actuator for deflecting the second structural plate; and

wherein the first and second actuators are electrically coupled.

7. The apparatus of claim 5, wherein the first actuator is operable to deflect the first structural plate toward the base layer at a position away from the second structural plate, the apparatus further comprising:

a third actuator operable to deflect the first structural plate toward the base layer at a position near the second structural plate.

8. A MEMS device adapted for overcoming a stiction force incident at a stop position, the device comprising:

a base layer;

a first plate supported by a first pivot, wherein the first plate is disposed above the base layer and the first pivot is disposed on the base layer;

a second plate supported by a second pivot, wherein the second plate is disposed above the base layer and the second pivot is disposed on the base layer;

a first actuator for deflecting the first plate and a second actuator for deflecting the second plate, wherein the first actuator is electrically connected to the second actuator; and

wherein energizing the first and second actuators causes the first plate to deflect away from the second plate and the second plate to deflect away from the first plate.

9. A method for generating a physical force in an electro-mechanical device, the method comprising:

providing a base layer;

providing a first pivot and a second pivot disposed on the base layer;

providing a first structural plate supported by the first pivot and disposed above the base layer;

providing a second structural plate supported by the second pivot and disposed above the base layer; and

deflecting the second structural plate to contact the first structural plate.

10. The method of claim 9, wherein the deflecting the second structural plate is caused, at least in part, by a restorative force between the second structural plate and the second pivot.

11. The method of claim 9, the method further comprising;

providing an actuator disposed on the base layer and under the second structural plate; and

activating the actuator to create an electric field force, wherein the deflecting the second structural plate is caused, at least in part, by the electric field force.

12. The method of claim 9, the method further comprising:

providing a first actuator disposed on the base layer and under the first structural plate;

providing a second actuator disposed on the base layer and under the second structural plate; and

activating the first actuator, wherein the first actuator creates a first electric field force;

activating the second actuator, wherein the second actuator creates a second electric field force, wherein the deflecting the second structural plate is caused, at least in part, by a combination of the second electric field force and a restorative force between the second structural plate and the second pivot.

13. The method of claim 9, wherein the deflecting the second structural plate comprises moving the second structural plate into contact with the first structural plate.

14. The method of claim 9, wherein a stiction force exists at a point of contact between the first structural plate and the base layer, and wherein a combination of a restorative force between the first structural plate and the first pivot and the disturbance in the molecule build-up or adhesion force is sufficient to overcome the stiction force.

15. The method of claim 9, the method further comprising:

providing an actuator disposed on the base layer and under the second structural plate; and

activating the actuator to create an electric field force, wherein the deflecting the second structural plate is caused, at least in part, by the electric field force, and wherein a first impact occurs between the first structural plate and the second structural plate;

deactivating the actuator, wherein the second structural plate moves away from the first structural plate; and

reactivating the actuator to create the electric field force, wherein a second impact occurs between the first structural plate and the second structural plate.

16. A wavelength router for receiving light having a plurality of spectral bands at an input port and directing a subset of the spectral bands to one of a plurality of output ports, the wavelength router comprising:

a free-space optical train disposed between the input port and the output ports, wherein the optical train provides at least one path for routing the subset of the spectral bands, the optical train including a dispersive element disposed to intercept light traveling from the input port; and

a routing mechanism having at least one dynamically configurable routing element to direct a given spectral band to different output ports depending on a state of the dynamically configurable routing element, wherein the dynamically configurable routing element comprises:

a control member supported by a first pivot and disposed over a base layer, wherein the control member is tilted such that an edge of the control member contacts a first point above the base layer;

a micromirror assembly supported by a second pivot and disposed adjacent to the control member over the base layer, wherein the micromirror assembly is tilted such that an edge of the micromirror assembly contacts a second point on the control member; and

wherein a combination of a restorative force between the control member and the first pivot and a restorative force between the micromirror assembly and the second pivot causes the micromirror assembly to deflect toward a static position.